

ments for the handling of creamery butter next year. Already members of three strong firms have decided to visit Ontario next spring for that purpose. Then the full proof of the butter has been in the forcing of it, and right well has its quality backed up my strong statements of commendation.

I find English and Irish dairymen eager to learn all they can about our co-operative systems and methods. These notices in the press calling attention to the excellency of our butter and cheese and the suitability of Ontario for extensive and profitable dairying, if cut from all the copies of the different papers and joined into one strip, would measure over 300 miles long. All of which I hope will help to make dairying still more remunerative to the farmers who patronize cheese factories and creameries.

Your obedient servant,

JAS. W. ROBERTSON.

London, Eng., Oct. 19th.

Drying off Cows.

Ninety percent of the spoiled udders are destroyed by bad management in drying off cows at the close of the milking season. When they are giving so little milk that it is not deemed advisable to milk regularly to save it, they are pretty apt to be neglected and to go so long between milkings as to induce inflammation in one or more quarters of the udder, and when inflammation is once established there, it is a pretty difficult matter to counteract it. The milk thickens in the reservoirs of the udder, and as the curd cannot pass out through the small tubes leading into the teats, it remains there to irritate and keep up inflammation until the part of the udder involved is spoiled beyond remedy. Milk should, therefore, be drawn often enough to keep the bag limp and cool. The time between milkings may be more and more extended, but the watchfulness should be constant, and at the first indications of any extra warmth or thickening of any part of the bag, the milking had better be done daily, or twice or thrice daily, until all danger from an accumulation is past. Attention to no detail in the management of a herd is more essential than this item of care in drying off cows at the close of the milking season. Inflammation to any extent ought to be prevented, if possible, for if it is not severe enough to ruin any part of the udder entirely, it always impairs the activity of the inflamed part for the following season. A lack of proper care in this matter is often the mysterious cause which makes cows vary in their messes in different seasons, when food and other surroundings seem equally favorable. Better by far to keep up milking until the next calf is dropped than to allow any feverishness or swelling of the udder to occur from an accumulation of retained milk. It is well to keep this matter in mind just now, as the season for drying off cows which are to come in again in early spring is near at hand.

In Flanders the urine of cattle is saved separately from the solid excrement, and is sold to gardeners at the rate of \$10 per cow for a year.

The agricultural products of Germany, exclusive of wheat, amount to two-thirds as much as those of the United States, and yet we have single States whose area exceeds that of the German Empire. If this speaks well for the thoroughness of German farming, it is not flattering to the skill of the average American agriculturist.—[Philadelphia Press.

Poultry.

Scattered Hints in the Poultry Business.

We take the following notes from the able pen of Fanny Field, as appears in the *Prairie Farmer*:

ABOUT FOOD.—A few weeks ago a lady who is in the poultry business wrote me that out of 560 chickens hatched this season, she had lost but 13. After I read Mrs. King's experience, I wrote and asked this lady to tell me what she fed her chickens, and how often. Yesterday her answer came; here it is: "My regular feed is 2 parts of corn-meal, 1 part of good wheat middlings, and 1 part ground oats thoroughly mixed together when dry. To a bushel of this mixture I add 1 quart of ground raw bone. I cook it by pouring on boiling water enough to make what I call a dry dough—i. e., it is just wet enough to stick together; then I cover the bucket close and let the dough cool before feeding. At night I scald enough for the morning feed, and after breakfast I prepare enough to last through the day. Feed this dough three times a day, and cracked corn once (at night) a day, giving all they would eat up clean each time. The hens were placed in coops which were scattered around in the orchard in the garden, and in the edges of the potato and corn field. The chicks had full liberty in all kinds of weather to come out and go where they pleased. No gapes, no lice, no sickness of any kind. Those that died were weaklings from the beginning. Last year many of my chicks died of gapes. This year the coops, even the new ones, were whitewashed before the broods were put in, and any time they were moved a little lime was sprinkled over the ground. I think the lime prevented the gapes, for I have taken no other precautions.

WAS IT LICE?—Mr. Bogardus, did you examine the hens that the hens left 3 or 4 days before the chicks were due? In the early days of our chicken experience one of our hens left her nest and wouldn't go back. As the chicks were due in three or four days we thought we would finish the hatching in the house, but we didn't, for when we went to remove the eggs we found that the nest contained millions, yes millions of lice!

MORE LICE.—An Iowa beginner in poultry-keeping writes me that the chickens, which are now from half to two-thirds grown, don't do well at all. Says they eat pretty well, but do not grow as they ought in proportion to the food consumed, and they "look ragged"—don't seem to feather up nicely. Probably lice are at the bottom of the trouble. Chickens that are covered with lice "don't do well at all." Get rid of the lice, and your chicks will take a start and grow, unless they receive a hopeless set-back otherwise.

ABOUT "LUCK."—One man writes me that he has had "good luck" with his chickens this season; another man says that he has had "no luck at all," and a third declares that "this poultry business is all luck and chance any way." Now if there is one word that I fairly detest, that word is "luck." I don't believe in luck, and the less you believe in it, the better you will succeed in the poultry business. "Good luck" is simply the result of good management

and hard work; "bad luck" the result of neglect, and that's all there is about it. Yes, I know that sometimes failure and loss overtake the poultry keeper who has seemingly done everything necessary to insure success; but still there is a cause somewhere, and a strict investigation will generally bring it to light. Once upon a time a neighbor's chickens commenced dying off from some disease that appeared like cholera, but there was no cholera in the vicinity, and her fowls were well cared for in every respect. She was discouraged at her "poor luck." I told her that there was no luck about it—that there was some cause for that sickness. "But where?" A search revealed the "where" and the "why," in the shape of the putrid carcass of a pig, which the fowls had scratched half out of its shallow grave in the corn field. But these fowls died after the cause was taken care of. When your poultry business does not prosper, don't sit down and with folded hands bewail your "poor luck," but form yourself into an investigating committee, and search out the cause of failure, then try to remedy it.

ABOUT CHOLERA.—The tobacco mixed with raw meal which cured Mrs. King's chickens of "cholera, or some other ailments," didn't cure a New Mexico lady's chickens of a disease which I think was genuine cholera. And it is just so with all the "cholera cures;" remedies which cure fowls in one locality fail entirely in other localities. The cold fact is that not one person in fifty who has cured fowls of disease knows whether that disease was "cholera or some other ailment." Their fowls were sick, some died; they doctored the sick ones and some got well, and on the strength of that they rushed into print with another "sure cure" for cholera. Take no stock in such "cures."

The lime process for preserving eggs is as follows:—Take salt one pint, lime one quart, and water sufficient. Slake with hot water and add water enough to make four gallons. After it has settled, pour the clear liquid off into a pan or some suitable vessel, and add eggs as desired, being careful not to crack the shells or they will spoil. You can add fresh eggs at any time. Keep the vessel in a dark, cool place.—Ex.

It is said that near Louisville, Kentucky, a novel mode of mulching strawberries has been adopted, and that is by sowing the space between the rows with rye, which if sowed in season grows so as to be a sufficient protection for the plants during the winter, and then in the spring, as it attains to some size, by cutting or pulling and placing between the rows, serves as a suitable and very clean summer mulch. It is very evident that moisture is an important factor in strawberry culture, and all that can be stirred by means of mulching will tend to improve the crops.

People and Patroit, of New Hampshire, gives a compost as a substitute for stable manure, as follows: "With a cord of seasoned meadow muck, or some substitute, mix sixty-five pounds of crude nitrate of soda, two bushels of wood ashes, one peck of common salt, ten pounds of fine bone meal, two quarts of plaster and ten pounds of epsom salts." No doubt this compost would serve a most excellent purpose and prove fully equal, if not superior, to many commercial fertilizers. It must be observed that in one respect it largely resembles stable manure, in the large proportion of organic matter in the meadow muck, which is so important in the soil.